

## CLAIMS

1. A pressure-sensitive adhesive sheet comprising a substrate, and a pressure-sensitive adhesive layer laminated on said substrate, the pressure-sensitive adhesive sheet characterized in that:

gas-passing channels that communicate to the outside of the pressure-sensitive adhesive sheet are formed in at least the pressure-sensitive adhesive layer side of said substrate;

a plurality of penetrating passages that penetrate or are capable of penetrating through said pressure-sensitive adhesive layer in a thickness direction are formed in said pressure-sensitive adhesive layer; and

said gas-passing channels in said substrate and said penetrating passages in said pressure-sensitive adhesive layer communicate with one another.

2. The pressure-sensitive adhesive sheet according to claim 1, characterized in that recesses that continue as far as side edges of said substrate are provided in the pressure-sensitive adhesive layer side of said substrate.

3. The pressure-sensitive adhesive sheet according to claim 1, characterized in that at least the pressure-sensitive adhesive layer side of said substrate comprises a foam containing open cells.

4. The pressure-sensitive adhesive sheet according to any of claims 1 through 3, characterized in that said penetrating

passages in said pressure-sensitive adhesive layer are formed through gas passing through said pressure-sensitive adhesive layer.

5. The pressure-sensitive adhesive sheet according to any of claims 1 through 3, characterized in that said penetrating passages in said pressure-sensitive adhesive layer are formed by laser processing.

6. The pressure-sensitive adhesive sheet according to any of claims 1 through 3, characterized in that said penetrating passages in said pressure-sensitive adhesive layer are formed by patterning when forming said pressure-sensitive adhesive layer.

7. The pressure-sensitive adhesive sheet according to any of claims 1 through 3, characterized in that said penetrating passages in said pressure-sensitive adhesive layer are constituted from foam cells.

8. A method of manufacturing a pressure-sensitive adhesive sheet, characterized by laminating or forming a pressure-sensitive adhesive layer having therein a plurality of penetrating passages that penetrate or are capable of penetrating through in a thickness direction of the layer onto one surface of a substrate at least said one surface of which is formed with gas-passing channels that communicate to the outside of the pressure-sensitive adhesive sheet, such that said gas-passing channels in said substrate and said penetrating passages in said pressure-sensitive adhesive layer communicate with one another.

9. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 8, characterized in that recesses

that continue as far as side edges of said substrate are provided in said one surface of said substrate so as to form said gas-passing channels in said substrate.

10. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 8, characterized in that at least said one surface of said substrate comprises a foam containing open cells.

11. The method of manufacturing a pressure-sensitive adhesive sheet according to any of claims 8 through 10, characterized in that a pressure-sensitive adhesive layer is formed by coating a pressure-sensitive adhesive onto a release treated surface of a release liner said release treated surface of which is formed with a plurality of holes, and gas from the holes in said release liner is made to move to the outside of said pressure-sensitive adhesive layer so as to form said penetrating passages in said pressure-sensitive adhesive layer.

12. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 11, characterized in that said release liner has a support made of a material containing air and/or moisture, a release agent layer is formed by coating a release agent onto said support of said release liner, and air and/or water vapor from said support is made to move to the outside of said release agent layer so as to form holes in said release agent layer.

13. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 11, characterized in that said release liner has a support made of a material containing air and/or

moisture, an undercoat layer is formed on said support of said release liner, air and/or water vapor from said support is made to move to the outside of said undercoat layer so as to form holes in said undercoat layer, and a release agent is coated onto said undercoat layer having said holes therein so as to form a release agent layer having holes therein.

14. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 11, characterized in that said release liner has a support made of a material containing air and/or moisture, an undercoat layer and a release agent layer are formed in order on said support of said release liner, and air and/or water vapor from said support is made to move to the outside of said release agent layer so as to form holes in said undercoat layer and said release agent layer.

15. The method of manufacturing a pressure-sensitive adhesive sheet according to any of claims 12 through 14, characterized in that a gas barrier layer is formed in advance on a non-release treated surface side of said support.

16. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 11, characterized in that an undercoat layer having holes therein is formed on a support of said release liner with a foamed sealer, and a release agent is coated onto said undercoat layer having said holes therein so as to form a release agent layer having holes therein.

17. The method of manufacturing a pressure-sensitive adhesive sheet according to any of claims 8 through 10, characterized

in that said penetrating passages are formed in said pressure-sensitive adhesive layer by subjecting said pressure-sensitive adhesive layer to laser processing.

18. The method of manufacturing a pressure-sensitive adhesive sheet according to any of claims 8 through 10, characterized in that said penetrating passages are formed in said pressure-sensitive adhesive layer by forming foam cells in said pressure-sensitive adhesive layer.

19. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 10, characterized in that a pressure-sensitive adhesive is directly coated onto said foam of said substrate, and penetrating passages that communicate with cell openings in said foam are formed in said pressure-sensitive adhesive layer.

20. The method of manufacturing a pressure-sensitive adhesive sheet according to claim 19, characterized in that the thickness of application of the pressure-sensitive adhesive is changed from region to region, and said penetrating passages that communicate with the cell openings in said foam are formed in regions where said pressure-sensitive adhesive layer is thin or regions where said pressure-sensitive adhesive layer is not formed.

21. The method of manufacturing a pressure-sensitive adhesive sheet according to any of claims 8 through 10, characterized in that said penetrating passages are formed in said pressure-sensitive adhesive layer by coating a pressure-sensitive adhesive in a prescribed pattern.

22. A release liner, characterized in that a plurality of holes of diameter 0.1 to 2000  $\mu\text{m}$  that do not penetrate through the release liner are formed in a release treated surface side.

23. A method of manufacturing a release liner, characterized by coating a release agent onto a support made of a material containing air and/or moisture so as to form a release agent layer, and making air and/or water vapor from said support move to the outside of said release agent layer so as to form holes in said release agent layer.

24. A method of manufacturing a release liner, characterized by forming an undercoat layer on a support made of a material containing air and/or moisture, making air and/or water vapor from said support move to the outside of said undercoat layer so as to form holes in said undercoat layer, and coating a release agent onto said undercoat layer having said holes therein to form a release agent layer having holes therein.

25. A method of manufacturing a release liner, characterized by forming an undercoat layer and a release agent layer in order on a support made of a material containing air and/or moisture, and making air and/or water vapor from said support move to the outside of said release agent layer so as to form holes in said undercoat layer and said release agent layer.

26. The method of manufacturing a release liner according to any of claims 23 through 25, characterized in that a gas barrier layer is formed in advance on a non-release treated surface side of said support.

27. A method of manufacturing a release liner, characterized by forming on a support an undercoat layer having holes therein with a foamed sealer, and coating a release agent onto said undercoat layer having said holes therein to form a release agent layer having holes therein.